

MAR - 9 2001

K010367

## SUMMARY OF SAFETY AND EFFECTIVENESS

**NAME OF FIRM:** DePuy Orthopaedics, Inc.  
P.O. Box 988  
700 Orthopaedic Drive  
Warsaw, IN 46581-0988

**510(k) CONTACT:** Arlene C. Saull, RAC  
Senior Regulatory Associate

**TRADE NAME:** Titanium Tri-Lock® Hip Stem

**COMMON NAME:** Hip prosthesis

**CLASSIFICATION:** Class II per 888.3358 Hip joint metal/polymer semi-constrained porous-coated uncemented prosthesis

**DEVICE PRODUCT CODE:** 87 LPH Prosthesis, hip, semi-constrained, metal/polymer, porous uncemented

**SUBSTANTIALLY EQUIVALENT DEVICE:** Tri-Lock® Hip Stem (CoCr), cleared on July 26, 2000 in K001982

### **DEVICE DESCRIPTION AND INTENDED USE:**

The Titanium Tri-Lock Hip Stem is porous coated and intended for cementless use in total hip arthroplasty. The femoral hip stem is manufactured from ASTM F-620, forged titanium alloy. Its porous-coating is manufactured from commercially pure titanium beads conforming to ASTM F-67. The subject modified hip stem is intended to be used with a modular head (manufactured from ASTM F-75 CoCr, or Zirconia ceramic) which locks onto the femoral hip stem. The modular head articulates with an acetabular cup of an appropriate diameter.

### **INDICATIONS:**

Total hip arthroplasty is intended to provide increased patient mobility and reduce pain by replacing the damaged hip joint articulation in patients where there is evidence of sufficient sound bone to seat and support the components. Total hip replacement is indicated in the following conditions:

1. A severely painful and/or disabled joint from osteoarthritis, traumatic arthritis, rheumatoid arthritis, or congenital hip dysplasia
2. Avascular necrosis of the femoral head
3. Acute traumatic fracture of the femoral head or neck
4. Failed previous hip surgery including joint reconstruction, internal fixation, arthrodesis, hemiarthroplasty, surface replacement arthroplasty, or total hip replacement
5. Certain cases of ankylosis

### **BASIS OF SUBSTANTIAL EQUIVALENCE:**

The subject Titanium Tri-Lock Hip Stem is identical (except for the material) to the previously cleared Tri-Lock Hip Stem (CoCr) that was cleared in 2000. It has the same intended use, same dimensions, same method of manufacture, same design, same sterilization and packaging methods. The Titanium Tri-Lock Hip Stem demonstrated adequate performance in design control activities.

**000004**



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

MAR - 9 2001

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Ms. Arlene C. Saull  
Senior Regulatory Associate  
DePuy Orthopaedics, Inc.  
700 Orthopaedics Drive  
P.O. Box 988  
Warsaw, Indiana 46581

Re: K010367  
Trade Name: Titanium Tri-Lock® Hip Stem  
Regulatory Class: II  
Product Code: LPH  
Dated: February 6, 2001  
Received: February 7, 2001

Dear Ms. Saull:

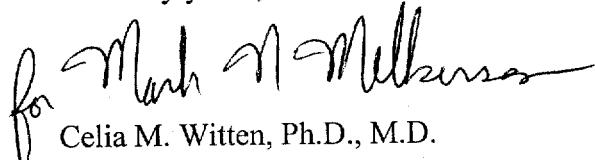
We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general control provisions of the Act. The general control provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the current Good Manufacturing Practice requirement, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic (QS) inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4659. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or at (301) 443-6597, or at its Internet address "<http://www.fda.gov/cdrh/dsmamain.html>".

Sincerely yours,



Celia M. Witten, Ph.D., M.D.

Director

Division of General, Restorative and

Neurological Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

510(k) Number (if known) K01 0367

Device Name: Tri-Lock® Hip Stem

**Indications for Use:**

Total hip arthroplasty is intended to provide increased patient mobility and reduce pain by replacing the damaged hip joint articulation in patients where there is evidence of sufficient sound bone to seat and support the components. Total hip replacement is indicated in the following conditions:

1. A severely painful and/or disabled joint from osteoarthritis, traumatic arthritis, rheumatoid arthritis, or congenital hip dysplasia.
2. Avascular necrosis of the femoral head.
3. Acute traumatic fracture of the femoral head or neck.
4. Failed previous hip surgery including joint reconstruction, internal fixation, arthrodesis, hemiarthroplasty, surface replacement arthroplasty, or total hip replacement.
5. Certain cases of ankylosis.

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Concurrence of CDRH, Office of Device Evaluation:

for Mark N. Milkeran  
(Division Sign-Off)  
Division of General, Restorative  
and Neurological Devices

510(k) Number K010367

Prescription Use \_\_\_\_\_ OR Over-The Counter Use \_\_\_\_\_ (Per 21 CFR 801.109)

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